

PHASE I:	Generally 0 - 6 weeks post-op		
PHASE I GOALS:	Protect the surgical repair & avoid a "stiff" shoulder		
PRECAUTIONS:	*NO active use of arm - must ALWAYS wear sling/immobilizer, even while sleeping*		
ROM GUIDELINES:	Progressive ROM exercises as tolerated		
SLING:	Sling/immobilizer with abduction pillow is worn for 4-6 weeks per ortho/PT		
WOUND:	Post-op dressing remains intact until post-op day #2 (~48 hours after surgery) May begin showering after post-op day #2 (no need to cover incision site)  *Do NOT submerge shoulder in tub or pool for 4 weeks* Suture/staple removal @ 7-10 days per Ortho/PT Begin scar massage after incision site sloughs/scar is formed		
REHABILITATION:	*Note: Exercise prescription is dependent upon the tissue healing process and <i>individual</i> functional readiness in <i>all</i> stages. If any concerns or complications arise regarding the progress for any patient, physical therapy will contact the orthopedic surgeon. Start with the following exercises: (10-20 repetitions, 3-4 x daily)		
~weeks 1-2	Modified Pendulum: (May be done in the sling.) While supporting the affected arm with the unaffected hand, move the shoulder forward, backward, side to side and in clockwise and counterclockwise directions. Progress to full pendulum after 3-5 days.  Supine Assisted Shoulder Flexion: Lie on back with arm down at side and thumb pointed towards the ceiling. Use unaffected hand to grasp the wrist of the affected arm and slowly raise it until a point of mild discomfort.  Elbow, Wrist, & Hand: Perform elbow and wrist flexion, extension, pronation, and supination while holding the shoulder in a neutral position at side. For the hand, use a foam		
~weeks 3-4	Aerobic Conditioning on Recumbent Bike: *Sling must be worn* Scapular Retraction & Protraction: Gently "pinch" shoulder blades together. Hold for 5		
~weeks 5-6	seconds and relax. Then spread shoulder blades apart. Hold for 5 seconds and relax. <b>Lower Extremity Weight Lifting:</b> May begin leg & calf press, hamstring curls, hip add/abd <b>Shoulder AAROM exercises:</b> Wand, pulley, gentle towel stretch, etc.		
FOLLOW-UP:	Physical Therapy: weekly; Ortho: ~6 wks post-op; Supervised rehab: 1-2 x per wk		
DOCUMENTATION:	Precautions, pain level, medications and modalities Observation: (incision sites) - Signs/symptoms of infection? Site healing well? Neurovascular status: Distal pulses, motor and sensation intact? Shoulder passive ROM (forward flexion, ER with shoulder at side)		



PHASE II:	Generally 7-12 weeks post-op			
PHASE II GOALS:	ROM: Full shoulder flexion and internal rotation, $\sim$ 90% full external rotation Pain free ADLs			
PRECAUTIONS:	*NO pushups, heavy lifting, or other sports participation* *NO repetitive overhead use of shoulder*			
SLING:	Wean from wearing sling/immobilizer per ortho/PT guidance			
REHABILITATION:	Continue phase I exercises as needed Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no increase in shoulder pain or stiffness since the previous exercise session) *Note: all strengthening should be done, starting with low weights, high repetitions, and in a painless ROM*			
~weeks 7-8	Upper body cycle: begin with three 1-min sets (forwards and backwards) progress gradually Shoulder AROM and AAROM exercises: Wand, pulley, towel stretch, sleeper's stretch, etc. Progressive strengthening: ER & IR with arm at side, FF & scaption to 60-90°, prone rows (first set: 20 repetitions, then 1 additional set at the same weight to muscle failure)			
~weeks 9-12	Beginning level pool program – no overhead strokes Aerobic Conditioning: Bike, elliptical, stairmaster as desired. Beginning level neuromuscular/functional training exercises (see appendix) Beginning level shoulder stabilization exercises (see appendix) May begin jogging (start with 5 minutes and progress gradually as tolerated) Progressive strengthening: ER/IR with shoulder in 30° elevation, FF/scaption to 60-90°, rows (first set: 15 reps, then 2 additional sets at the same weight to muscle failure) Beginning to intermediate level neuromuscular/functional training exercises (see appendix) Beginning to intermediate level shoulder stabilization exercises (see appendix)			
FOLLOW-UP:	Physical Therapy: bimonthly; Ortho: ~3 months post-op; Supervised rehabilitation: 2-3 x per week as needed			
DOCUMENTATION:	Pain level, medications, modalities Shoulder ROM & strength			



PHASE III:	Generally 4-6 months post-op		
PHASE III GOALS:	Pushups at own pace without pain		
	≥ 90% internal/external rotation strength return		
PRECAUTIONS:	*NO participation in contact/collision sports or military schools until ~9 months post-op*		
REHABILITATION:	Continue phase II exercises as needed		
	Progress to the following exercises and increase intensity gradually when patient is ready		
	(i.e., no increase in shoulder pain or stiffness since the previous exercise session) *Note: all strengthening should be done, starting with low weights, high repetitions, and		
	in a painless ROM*		
~weeks 13-16	Warm-up: 5-10 minutes on upper body cycle General upper quarter stretching: 5-10 minutes (shoulder, thoracolumbar spine)		
	Progressive strengthening: ER/IR with shoulder in 45-90° elevation, FF/scaption to 90-120°,		
	(first set: 10-15 reps, then 2 additional sets at the same weight to muscle failure)		
	May also begin general light intensity strengthening with shoulder in "safe" position (avoid heavy overhead lifting, avoid shoulders in the 90° elevation, 90° ER position)		
	Intermediate level neuromuscular/functional training exercises (see appendix)		
	Intermediate level shoulder stabilization exercises (see appendix)		
~weeks 17-26	Intermediate/advanced level neuromuscular/functional training exercises (see appendix) Intermediate/advanced level shoulder stabilization exercises (see appendix)		
	Progressive sports training: Begin at 25-50% intensity, progress gradually (see appendix)		
FOLLOW-UP:	PT: Monthly; Ortho: ~6 months post-op; Supervised rehabilitation: 1-2 x per week as needed		
	Supervised rendsimulion 1 2 x per week as needed		
DOCUMENTATION:	Pain level & medications		
	Shoulder ROM & strength Biodex testing at 6 months post-op		
MISCELLANEOUS:	After 6 months post-op: Exercises in phase III are continued, gradually increasing intensity & duration as tolerated.		
	The recommendation is to wait until 6 months post-op to return to contact/collision		
	Sports. This time period may be		
	adjusted slightly by the surgeon and therapist according to patient progress.		



## **APPENDIX: GENERAL SHOULDER PROGRESSIONS**

\*The following is a supplement to the rehabilitation guidelines on various types of shoulder exercises. It is not an all-inclusive list, but provides ideas for gradually progressing a patient through rehabilitation\*
In general, beginning level shoulder exercises are performed with light resistance in a ROM below 90° of shoulder elevation. Intermediate level exercises are done with moderate resistance in a ROM below 120°.

Advanced level exercises are done with moderate resistance in a full ROM, but avoiding the 90° abducted, 90° externally rotated position until ~5-6 months post-op. All training should be pain free.

Exercise Type	Beginning Level	Intermediate Level	Advanced Level
	~7-10 weeks post-op	~9-18 weeks post-op	~16-26 weeks post-op
Body Blade	Flexion/Extension IR/ER Superior/Inferior	FF range to 90° Scaption to 90° IR/ER through ROM	FF range to 150° Scaption to 150° IR/ER through ROM
	(arm at side)	Horiz adb/add at 90°	Diagonal motions
Ball toss	Chest pass – 2 handed IR toss – (arm at side)	Overhead toss – (2 handed) Behind back toss	Overhead diagonal toss – (2 handed) Regular throwing toss
Prone stabilization	Weight shifting in sitting, standing, prone on all fours	All fours stabilization on stable surface	All fours stabilization on foam or theraball
Supine stabilization	Supine Shoulder Stabilization @ 90°	Supine Shoulder Stabilization from 60-120°	Supine Shoulder Stabilization (Available ROM)
Cuff strengthening	ER/IR — (arm at side)  FF/Scaption to 60-90°  (Thumb up)	ER/IR - (30-45° shld scaption)  FF/Scaption to 90-120°  (Thumb up)	ER/IR- (45-90°shld scaption)  – gradually moving into abd PNF patterns
Scapular strengthening	Ceiling "punches" Rows	"Pushouts" (in standing) Rows (inferior/superior)	Pushup plus
Pushups	none	Wall pushups – progressing to inclined pushups	Knee pushups – progressing to modified regular pushups
Misc activities	Basketball: dribbling, chest and bounce pass Golf: putting Volleyball: bumping Pool: jogging, treading Wall ball drawing	Basketball: shooting within the key only Golf: chipping, short irons Volleyball: setting Pool: No overhead strokes Tossing Frisbee Catching drills: below 90°	Basketball: noncontact drills only Golf: gradual return Vball: gradual return ~6 mo Pool: gradual return Forehand, backhand racquet sports (no overhead)